

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7 (previously deleted)

1 8. (currently amended): A method for fabricating a magnetic head, including the steps of:
2 fabricating a P1 pole, a write gap layer and a P2 pole tip;
3 notching said P1 pole using two ion beam etching steps including:
4 etching portions of said write gap layer utilizing a write gap etchant ion beam that is
5 formed from an etchant gas including C_2F_6 and argon, wherein said etching of said write gap
6 layer is conducted in part with a first write gap etchant ion beam angle away from normal of
7 from 5° to 30° , and in part with a second write gap etchant ion beam angle away from normal of
8 from 65° to 85° ;
9 subsequently etching portions of said P1 pole using a P1 pole etchant ion beam that is
10 formed using argon as an etchant gas, wherein said etching of said P1 pole is conducted in part
11 with a first P1 pole etchant ion beam angle away from normal of from 30° to 45° , and in part
12 with a second P1 pole etchant ion beam angle away from normal of from 65° to ~~85~~ 80° .

1 9. (original): A method for fabricating a magnetic head as described in claim 8 wherein
2 said C_2F_6 /Ar etchant gas includes C_2F_6 gas in a concentration range of from 50% to 90%.

1 10. (original): A method for fabricating a magnetic head as described in claim 9 wherein
2 said C_2F_6 gas concentration range is from 70% to 80%.

1 11. (original): A method for fabricating a magnetic head as described in claim 10 wherein
2 said concentration of C_2F_6 in said etchant gas is approximately 75%.

1 12. (previously deleted)

1 13. (previously amended): A method for fabricating a magnetic head as described in claim 8
2 wherein said first write gap etchant ion beam angle is from 10° to 20° and said second write gap
3 etchant ion beam angle is from 70° to 75° .

1 14. (previously amended): A method for fabricating a magnetic head as described in claim
2 13 wherein said first write gap etchant ion beam angle is approximately 10° .

1 15. (previously amended): A method for fabricating a magnetic head as described in claim
2 13 wherein said C_2F_6 /Ar ion beam is generated with an ion beam voltage of from 600-900 volts,
3 and an ion beam current of from 600-1200 mA.

1 16. (previously amended): A method for fabricating a magnetic head as described in claim
2 15 wherein said C_2F_6 /Ar ion beam voltage is in the range of 650-750 volts and said ion beam
3 current is in the range of 900-1100 mA.

1 17. (previously amended): A method for fabricating a magnetic head as described in claim
2 16 wherein a Ni fluoride thin film layer is formed on said P2 pole tip.

18. (currently amended): A method for fabricating a magnetic head, including the steps of:
fabricating a P1 pole, a write gap layer and a P2 pole tip;
notching said P1 pole in a process consisting essentially of the following two etching steps:
etching portions of said write gap layer utilizing a write gap etchant ion beam that is formed from an etchant gas including C_2F_6 and argon, wherein said C_2F_6 gas concentration range is from 70% to 80%; and wherein said etching of said write gap layer is conducted in part with a first write gap etchant ion beam angle away from normal of from 10° to 20° , and in part with a second write gap etchant ion beam angle away from normal of from 70° to 75° ;
subsequently etching portions of said P1 pole using a P1 pole etchant ion beam that is formed from argon as an etchant gas, wherein said etching of said P1 pole is conducted in part with a first P1 pole etchant ion beam angle away from normal of from 30° to 45° , and in part with a second P1 pole etchant ion beam angle away from normal of from 65° to 85° to 80° .

19. (previously added): A method for fabricating a magnetic head as described in claim 11, wherein said first write gap etchant ion beam angle is approximately 10° away from normal, and said first P1 pole etchant ion beam angle is approximately 30° away from normal.

20. (previously added): A method for fabricating a magnetic head as described in claim 18, wherein said C_2F_6 /Ar ion beam voltage is in the range of 650-750 volts and said ion beam current is in the range of 900-1100 mA.

- 1 21. (previously added): A method for fabricating a magnetic head as described in claim 20,
- 2 wherein said first write gap etchant ion beam angle is approximately 10° away from normal, and
- 3 said first P1 pole etchant ion beam angle is approximately 30° away from normal.